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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,243	08/20/2008	Gopi Kumar Bulusu	DAD-0021	8556

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EXAMINER	
BLOOMQUIST, KEITH D	
ART UNIT	PAPER NUMBER
2178	

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10/25/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,243	BULUSU ET AL.	
	Examiner	Art Unit	
	KEITH BLOOMQUIST	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-5* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1,4 and 5* is/are rejected.

8)☒ Claim(s) *2 and 3* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to amendments filed 10/12/2011.

2. Claims 1-5 are pending. All are currently amended.

3. A copy of PCT/IN2004/000020 has previously been received by the USPTO; the request for a certified copy of this document is withdrawn.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 5 remains rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 5 recites a system, but lists components which could all, in one embodiment, exist purely as software modules. The broadest reasonable interpretation of Claim 5 therefore includes an embodiment which is a software system. This embodiment is software *per se*, and not a process, machine, manufacture, or composition of matter within the scope of the statute.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 4, and 5 remain rejected under 35 U.S.C. 102(b) as being anticipated by Richard, U.S. PGPUB No. 2002/0073119 ("Richard").

Richard teaches a system and method for converting markup language documents with data from multiple sources, into a document in one of several other available formats. With regards to Claim 1, Richard teaches a method for transforming a heterogeneous compound document to a desired format based on a prescribed model comprising the steps of:

- (i) specifying components of the heterogeneous compound document as a hierarchical tree structure in multiple formats and specifying input sources of information for each of the components as part of said prescribed model ([0060], converter obtains heterogeneous data from various data sources, and outputs a stream of standardized output data in any number of markup languages. [0063] describes how the standardization interface creates hierarchical DOM trees resulting from the search which located the input sources for the sources of information. [0064] describes a resulting document RESDOC, which is assembled from the located components placed in various structures, and is assembled according to a model (the prescribed model for assembling an output document) specified in the application logic);
- (ii) verifying and composing the heterogeneous compound document using a modeling language parser and a document composer by dynamically obtaining input information from the input sources of information specified in said prescribed model ([0063], standardization interface creates trees of

various input source documents by parsing the sources; [0064] describes the assembling of the resulting document being carried out by dynamic searches of the DOMs in the converter output stream. The RESDOC is assembled via a conversion script, which selects appropriate nodes according to the prescribed model specified in the application logic); and

- (iii) converting the heterogeneous compound document to the desired format using the document composer ([0069] describes the converter converting the compound document into a desired format).

With regards to Claim 4, Richard teaches that the step of converting the heterogeneous compound document to the desired format is carried out by:

- (i) providing a model of the heterogeneous compound document and the root element of the model matching with the input, and an output document format identifier as inputs ([0054]-[0056], modules obtain target device information as input to determine form of output; transformation module can apply a transformation script to the document. [0102] describes a conversion script being invoked upon reading root element of a HTML document referring to the input document);
- (ii) obtaining a value list corresponding to the output document format identifier from the root element ([0104]-[0108], navigation logic is called for use in conversion corresponding to the input in HTML form, and searches document tree for specified nodes based on the desired format);

- (iii) considering each value from the value list obtained and (a) outputting the value if the value obtained is a constant; (b) obtaining the value list corresponding to the output document format identifier from the internal element or leaf element, if the value is a reference to an internal node element or leaf element and recursively repeating step (iii) for the new value list ([0144], desired information located in document nodes is found and text is output if constant text is found; [0120] describes values being obtained from elsewhere using a redirect function if data is in a separate location. [0104] and [0105] describe a recursive process whereby values for all nodes are either obtained locally or found elsewhere until an entire document tree has been analyzed).

With regards to Claim 5, Richard teaches a system for specifying, verifying, dynamically composing and i transforming a heterogeneous compound document based on a prescribed model, the system comprising:

- a modeling language for depicting the structure of a compound document in one or more formats as a hierarchical tree structure and specifying the information source for each component of the document, providing a root element describing root nodes which are at the top of the structure, an internal node element representing the internal nodes of the compound document and a leaf element representing the leaf nodes of the bottom the structure ([0060], a converter uses any number of markup languages to output a stream of standardized output; the hierarchical markup language

structures are assembled from heterogeneous components to be included in a final document, with sources specified in the creation of DOM trees per [0063]. Fig. 7 shows a model aggregator output RESDOC depicting the structure of the compound document, and it shows a RESDOC root element at the top, PROD, DIST, and CTRY internal nodes, and various leaf nodes at the bottom) ;

- a modeling language parser for parsing the models created using the modeling language, analysing the given model, checking whether the given model conforms to the modeling language syntax and creating an internal representation of the model elements ([0073], trees of the input and output documents are defined in DOM specifications. An output document is created by a node-by-node transformation, requiring a parsing to extract each element for applying a transformation script per [0077] et seq., which shows template types existing for node types identified through parsing. [0077], nodes satisfying a well-defined condition, i.e. conform to a syntax, have a transformation applied. Further, a finalizer in [0074] similarly traverses an entire output DOM to ensure that language syntax, such as that related to accent characters. This DOM is the internal representation of the model elements, as created by the applied script and verified by the finalizer);
- a model database, information about each element defined in the model being stored in the model database ([0151], information about transformations store information about all elements of the model and transformation steps

applied to it. The log and the XF conversion script can both be contained within a data store, such as the storage media described in [0153]) ;

- a stream module for obtaining data dynamically from different sources specified in the stream specification in a model for composing compound document (Fig. 4, XGate of tier 3 aggregates the data from the various supply sources shown in tier 4. [0060] describes the acquisition of data from the various sources being converted, standardized, and streamed as output data); and
- a document composer for composing the document in the format specified by the model using information from the model database and obtain input from multiple sources using the stream module and performing transformation on the composed document to convert it into any other format specified in the model ([0064], resulting document is assembled using elements from various DOM trees corresponding to the data sources, with the appropriate data acquired via dynamic query. The appropriate script for transformation, and the corresponding output type is specified by the model definition contained in the application logic).

Allowable Subject Matter

8. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Regarding foreign priority, Examiner inadvertently overlooked the Office's notice of receipt of the PCT application. The required documents have been received by the Office, and a proper claim for priority under 35 U.S.C. § 371 has been established. Examiner apologizes for any inconvenience caused by this oversight.

Regarding the rejection of Claim 5 under 35 U.S.C. § 101, the recitation of information stored in a model database, absent disclosure of a physical storage device, does not overcome the rejection. A database is a data structure defined in various files which indicate where and how various data are stored, and while typically a database is stored on a physical device, without a device in the claims, the broadest reasonable interpretation of "database" is the collection of computer files, which are software *per se*.

Regarding the art rejections of Claims 1, 4, and 5, Applicant's arguments have been fully considered but they are not persuasive. As noted in the above rejection, Richard does recite a prescribed model. [0064] states that a RESDOC document will be created from selected nodes of the DOM trees of the located input documents, and the resulting RESDOC document is created according to a model (the "prescribed model" for the type of document being produced) specified in the application logic. This logic is what creates the various output documents in various languages, and Richards discloses that the output hierarchical data structure is created in accordance with a prescribed model. Therefore, rejections of Claims 1, 4, and 5 are properly maintained in this action.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEITH BLOOMQUIST whose telephone number is (571)270-7718. The examiner can normally be reached on Monday through Thursday, 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. B./ 10/20/2011
Examiner, Art Unit 2178

/Kyle R Stork/
Primary Examiner, Art Unit 2178